

What is claimed is:

1. A method of managing a network which is for use in a network using SNMP(Simple Network Management Protocol) between a network management device for managing the network and a management object device
5 connected to the network management device through the network to be managed thereby, said method comprising the steps of:

compressing a data portion of an SNMP packet transferred between said network management device and
10 said management object device by a predetermined compression algorithm to transmit the SNMP packet including the compressed data portion; and

decompressing said compressed data portion of said SNMP packet by said predetermined compression
15 algorithm to carry out a predetermined processing on the SNMP packet.

2. A method as claimed in claim 1, wherein said network management device memorizes a plurality of said management object devices to which said predetermined compression algorithm is applicable, respectively, in a
5 table, said network management device compressing only said SNMP packet directed to the management object device to which said predetermined compression algorithm is applicable and which is memorized in said

table to form a transfer packet to be transmitted.

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3. A method as claimed in claim 1, wherein a bit "1" is set on a predetermined bit position of a packet tag showing a kind of a packet to be formed in a case that said data portion has been compressed by said predetermined compression algorithm, and wherein a bit "0" is set on the predetermined bit position of the packet tag showing a kind of a packet to be formed in the other case.

4. A network management system which is for use in a network using SNMP(Simple

Network Management Protocol) between a network management device for managing the network and a management object device connected to the network management device through the network to be managed thereby, comprising:

a packet which is transferred between said network management device and said management object device and which has a bit position for setting a compression indicating bit showing that said packet has been compressed by a predetermined compression algorithm; said network management device including:

a table for memorizing whether or not said predetermined compression algorithm is applicable to said management object device;

a compression/decompression processing section which investigates, by said table, whether or not said

predetermined compression algorithm is applicable to
20 said management object device as a transmission
destination, when SNMP packet is transmitted from said
network management device; said
compression/decompression processing section
compressing said packet with said compression indicating
25 bit being set on said bit position, when said
predetermined compression algorithm is applicable to
said management object device as said transmission
destination; said compression/decompression processing
section decompressing said packet, when said
30 compression indicating bit is set on said bit position of
SNMP packet received from said management object
device; and

a communication processing section which adds a
predetermined header to said SNMP packet to form a
35 transfer packet; said transfer packet being transmitted
to a transmission destination; said communication
processing section extracting said SNMP packet from a
received transfer packet; said communication processing
section transmitting the extracted SNMP packet to said
40 compression/decompression processing section, when said
compression indicating bit is detected from said bit
position of the extracted SNMP packet.

5. A network management system as claimed in claim 4,
wherein said management object device including:
a communication processing section which is connected to

the network management device through the network and
5 which adds a predetermined header to said SNMP packet
generated in said management object device to form a
transfer packet; said transfer packet being transmitted
to a transmission destination through the network; said
communication processing section extracting said SNMP
10 packet from a transfer packet received through the
network; said SNMP packet being transmitted to an
internal of said management object device; and

a compression/decompression processing section
which compresses SNMP packet directed to said network
15 management device with said compression indicating bit
being set on said bit position; said
compression/decompression processing section
decompressing said SNMP packet, when said compression
indicating bit is set on said bit position of SNMP packet
20 received from said management object device.

6. A network management system as claimed in claim 5,
wherein said communication processing section transmits
said extracted SNMP packet to said
compression/decompression processing section, in a case
5 that said compression indicating bit is set on said bit
position of the extracted SNMP packet, said
communication processing section canceling said received
packet in the other cases.